

**ABSTRACT OF THE DISCLOSURE**

A motor control apparatus includes a phase current  
detecting section for detecting phase currents to a motor, a  
5 current phase/current peak value calculating section for  
calculating a current phase based on the phase currents, a voltage  
phase setting section for adding a predetermined phase difference  
to the current phase and setting the resultant sum as a voltage  
phase, a phase voltage setting section for setting phase voltages  
10 to the motor based on the voltage phase and the command voltage.  
Basically, the motor is operated by maintaining the voltage at  
constant and always monitoring the current/voltage phases so as  
to maintain a constant phase difference, without the motor axis  
position being predicted.